

**FACILITATING INVERSE MULTIPLEXING OVER ASYNCHRONOUS  
TRANSFER MODE VIA COMMUNICATION LINKS HAVING DISPARATE DATA  
TRANSMISSION RATES**

**ABSTRACT OF THE DISCLOSURE**

5           A method for facilitating inverse multiplexing over asynchronous transfer mode is  
disclosed herein. The method includes receiving a stream of sequentially aligned ATM cells  
via an originating end point logical communication link. A sequence identifier is associated  
with each one of the ATM cells for creating sequence-identified ATM cells. The sequence-  
identified ATM cells are forwarded to a destination endpoint logical communication link in a  
10 distributed manner over a plurality of IM communication links. A first one of said IM  
communication links has disparate data transmission rates in at least one data transmission  
direction with respect to a second one of the IM communication links.